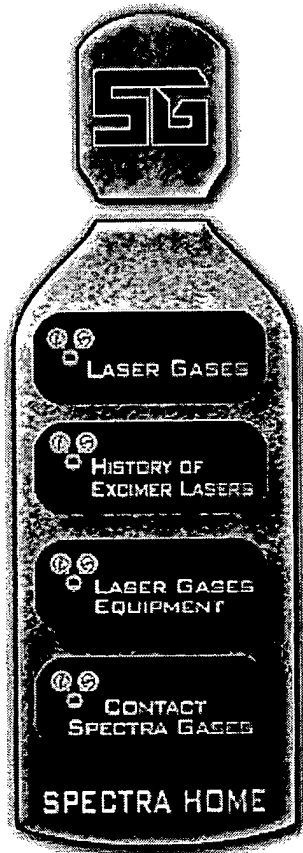


Xenon gas, Krypton gas, Neon gas, Deuterium, Helium-3 gas, VOC Gases, Excimer laser gases, PRK, TMR and Angioplasty Laser Gases, Sulfur Hexafluoride



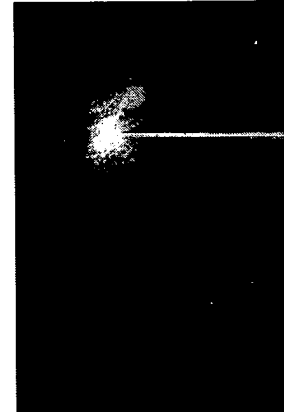
Spectra Gases

ISO 9001

PRK, TMR, and Angioplasty Laser Gases

Description

There are two (2) primary applications for excimer lasers in medicine. These two (2) applications are **LASER PHOTO REFRACTIVE KERATECTOMY (PRK)** and **LASER ANGIOPLASTY**.



Laser Vision Correction

Corneal Refractive Surgery for the correction of myopia, hyperopia and astigmatism has been safely demonstrated and has proven effective. In October of 1995 the United States Food and Drug Administration (FDA) approved the clinical use of excimer laser systems for PHOTO REFRACTIVE KERATECTOMY. In Europe, Asia, South America and Canada the PRK procedure has been helping correct vision since 1990.

The PRK procedure is soon expected to correct over one million eyes worldwide per year. Spectra Gases is supporting the PRK medical application with excimer laser gases and unique excimer handling equipment.

Laser Angioplasty

The FDA approved in 1993 the use of a fiber delivered XeCl (308 nm) excimer laser beam for removing calcified plaque in arteries. Excimer laser angioplasty is minimally invasive, debulking arteries supplementing balloon angioplasties.

Transmyocardial Revascularization

Another medical application under investigation is Transmyocardial Revascularization (TMR). TMR creates and maintains open channels through myocardium and is still experimental. The hope is that excimer based systems using the fiber delivered XeCl (308 nm) wavelength will ultimately reduce angina as well as the number and risk of bypass surgeries.

BEST AVAILABLE COPY

Typical PRK Excimer Laser Gas Mixture - 193 NM					
Gas Mixture	Cyl. Size	Volume (Liters)	Pressure PSIG/BAR	CGA	Recommended Regulator Series
0.20% Fluorine	1	7500	2400/167	679	7340
9.0% Argon	2	6000	2150/149		
Balance Helium	3	2000	1925/134		
and/or Neon	4	1000	2000/139		

Typical TMR and Angioplasty Excimer Laser Gas Mixture - 308 NM					
Gas Mixture	Cyl. Size	Volume (Liters)	Pressure PSIG/BAR	CGA	Recommended Regulator Series
0.06% Hydrogen Chloride	1	7500	2400/167	330	7340
0.03% Hydrogen	2	6000	2150/149		
1.5% Xenon	3	2000	1925/134		
Balance Neon	4	1000	2000/139		

Note:	DIN, JIS and other cylinder valves are available upon request (country dependent).
--------------	--

[Excimer Laser Premixes](#) | [Halogen Gas Mixtures](#) | [Laser Rare Gases](#) | [Buffer Gases](#) | [Semiconductor Laser Gases](#)

[PRK,TMR and Angioplasty Laser Gases](#) | [CO2 Laser Mixture](#) | [Visible Infrared Laser Gases](#)
[Laser Gases Equipment](#) | [History of Excimer Lasers](#) | [\(Back to Laser Gases\)](#)

[Contact Spectra Gases](#) | [Spectra Gases Home](#)